



**Attachment 2 – SAR Test Plots**

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

## Left Head, Cheek/Touch 661ch (1880.0MHz)

**DUT: Cellular Phone; Type: 830SH; Serial: 004401/11/149686/1**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.43 \text{ mho/m}$ ;  $\epsilon_r = 39.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(5.36, 5.36, 5.36); Calibrated: 2007/11/15
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2007/11/07
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DAS4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

**Cheek/Touch Position/Area Scan (11x6x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.725 mW/g

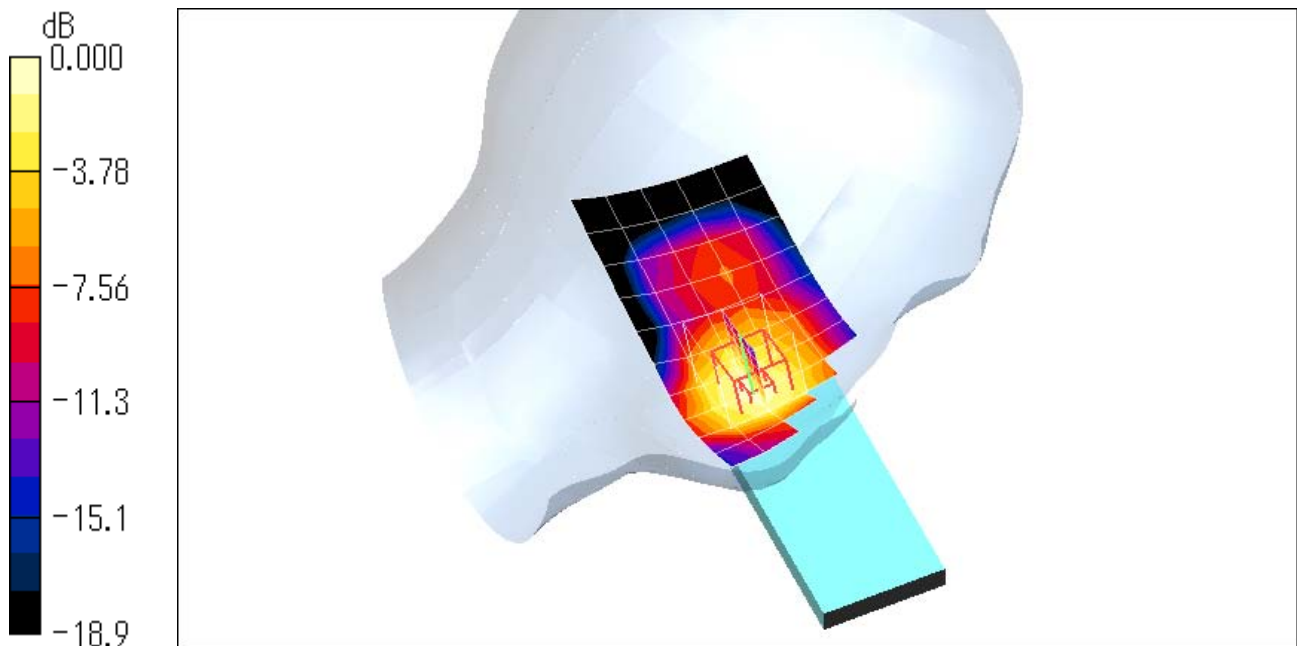
**Cheek/Touch Position/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 16.0 V/m; Power Drift = -0.092 dB

Peak SAR (extrapolated) = 0.994 W/kg

**SAR(1 g) = 0.655 mW/g; SAR(10 g) = 0.396 mW/g**

Maximum value of SAR (measured) = 0.715 mW/g



Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

## Left Head, Ear/Tilt 661ch (1880.0MHz)

**DUT: Cellular Phone; Type: 830SH; Serial: 004401/11/149686/1**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(5.36, 5.36, 5.36); Calibrated: 2007/11/15
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2007/11/07
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

**Ear/Tilt Position/Area Scan (11x6x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.214 mW/g

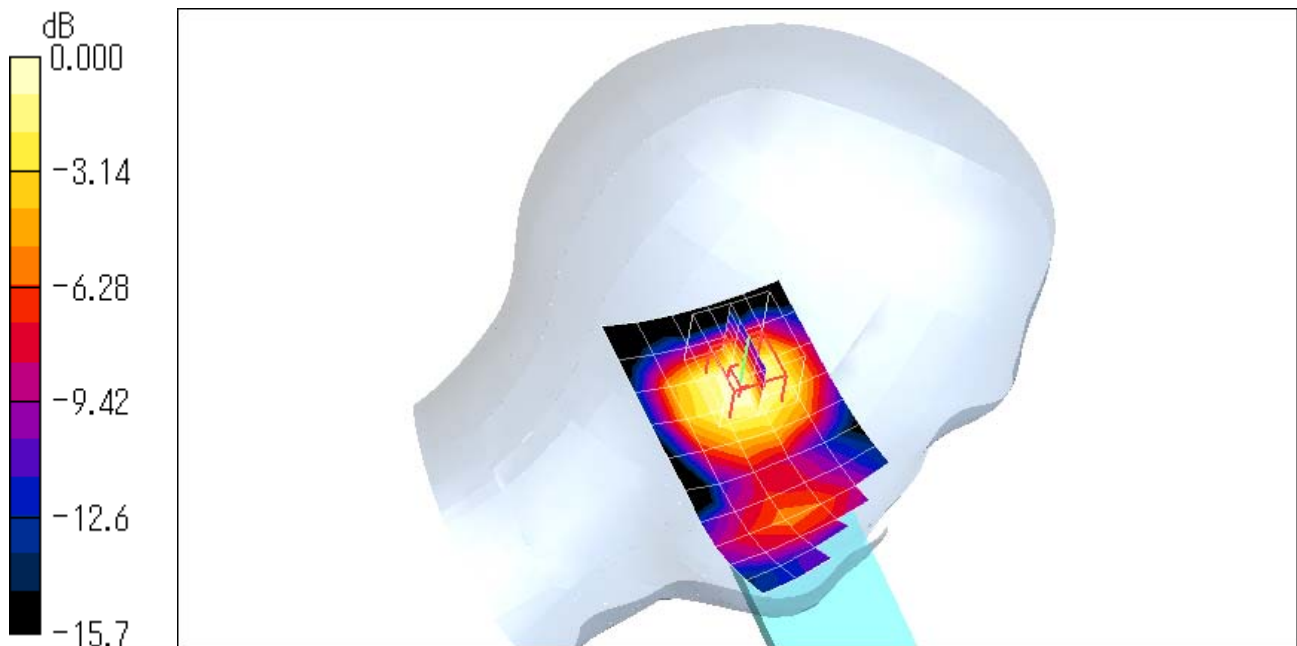
**Ear/Tilt Position/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.3 V/m; Power Drift = -0.051 dB

Peak SAR (extrapolated) = 0.335 W/kg

**SAR(1 g) = 0.223 mW/g; SAR(10 g) = 0.140 mW/g**

Maximum value of SAR (measured) = 0.236 mW/g



0 dB = 0.236mW/g

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## Right Head, Cheek/Touch 512ch (1850.2MHz)

**DUT: Cellular Phone; Type: 830SH; Serial: 004401/11/149686/1**

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.43 \text{ mho/m}$ ;  $\epsilon_r = 39.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(5.36, 5.36, 5.36); Calibrated: 2007/11/15
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2007/11/07
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DAS4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

**Cheek/Touch Position/Area Scan (11x6x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.732 mW/g

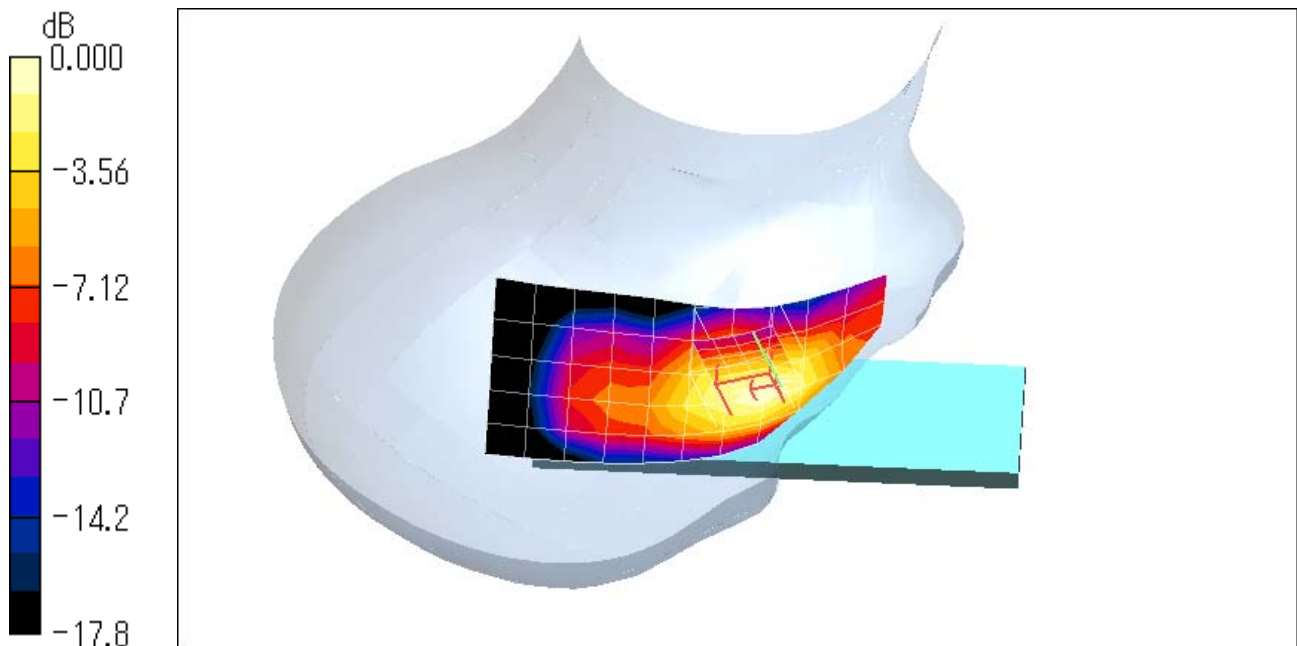
**Cheek/Touch Position/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 17.9 V/m; Power Drift = -0.006 dB

Peak SAR (extrapolated) = 1.05 W/kg

**SAR(1 g) = 0.717 mW/g; SAR(10 g) = 0.447 mW/g**

Maximum value of SAR (measured) = 0.766 mW/g



Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

## Right Head, Cheek/Touch 661ch (1880.0MHz)

**DUT: Cellular Phone; Type: 830SH; Serial: 004401/11/149686/1**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(5.36, 5.36, 5.36); Calibrated: 2007/11/15
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2007/11/07
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

**Cheek/Touch Position/Area Scan (11x6x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.738 mW/g

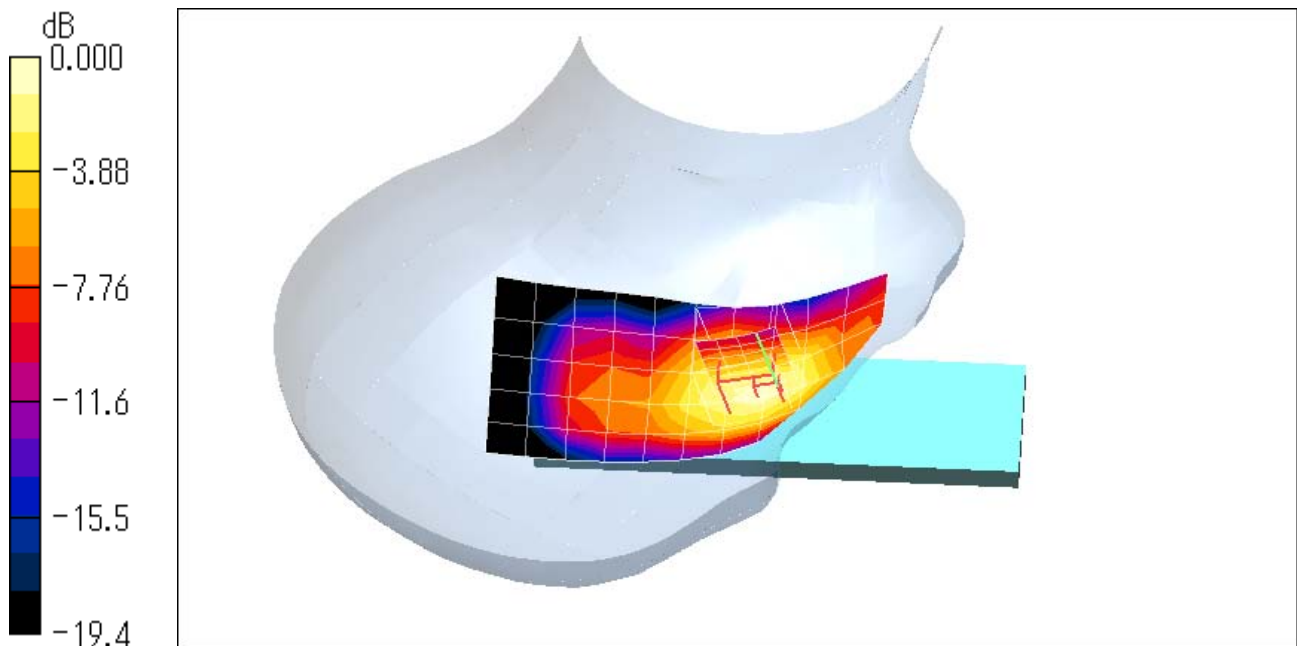
**Cheek/Touch Position/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.6 V/m; Power Drift = -0.099 dB

Peak SAR (extrapolated) = 1.10 W/kg

**SAR(1 g) = 0.735 mW/g; SAR(10 g) = 0.454 mW/g**

Maximum value of SAR (measured) = 0.797 mW/g



Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

**Right Head, Cheek/Touch 810ch (1909.8MHz)****DUT: Cellular Phone; Type: 830SH; Serial: 004401/11/149686/1**

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.43 \text{ mho/m}$ ;  $\epsilon_r = 39.6$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(5.36, 5.36, 5.36); Calibrated: 2007/11/15
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2007/11/07
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

**Cheek/Touch Position/Area Scan (11x6x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$ 

Maximum value of SAR (measured) = 0.753 mW/g

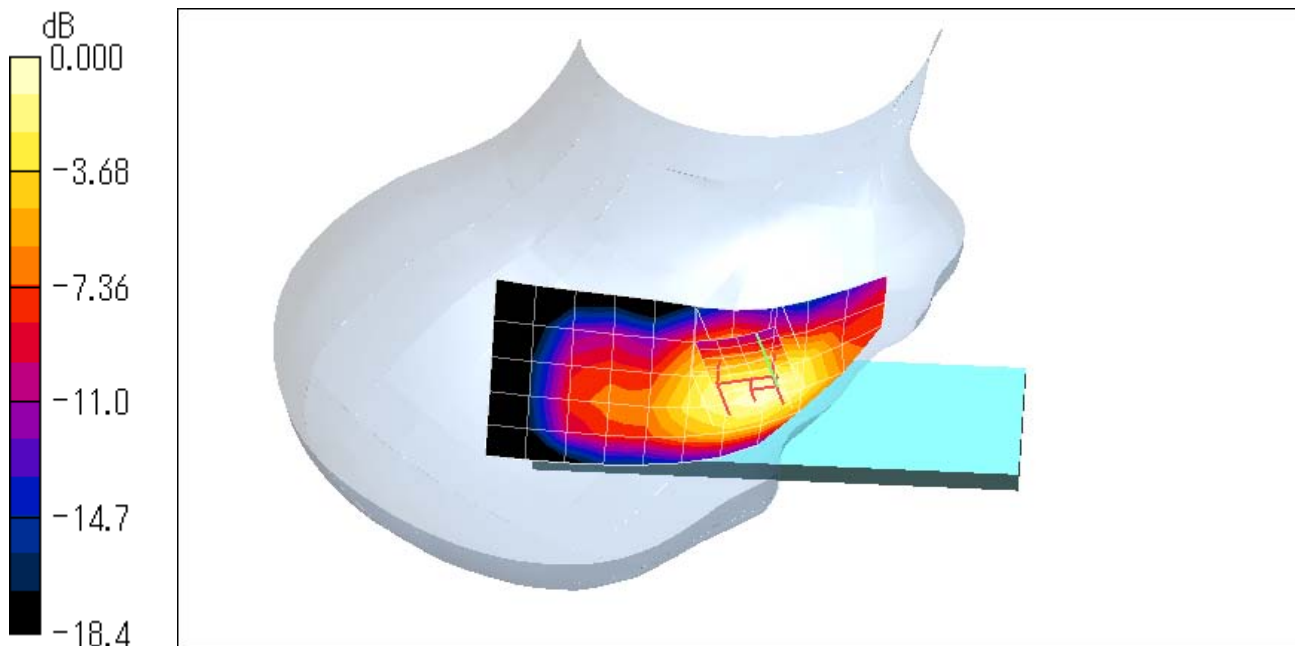
**Cheek/Touch Position/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 18.7 V/m; Power Drift = -0.025 dB

Peak SAR (extrapolated) = 1.13 W/kg

**SAR(1 g) = 0.753 mW/g; SAR(10 g) = 0.465 mW/g**

Maximum value of SAR (measured) = 0.809 mW/g



Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

## Right Head, Cheek/Touch 810ch (1909.8MHz)

**DUT: Cellular Phone; Type: 830SH; Serial: 004401/11/149686/1**

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.43 \text{ mho/m}$ ;  $\epsilon_r = 39.6$ ;  $\rho = 1000 \text{ kg/m}^3$

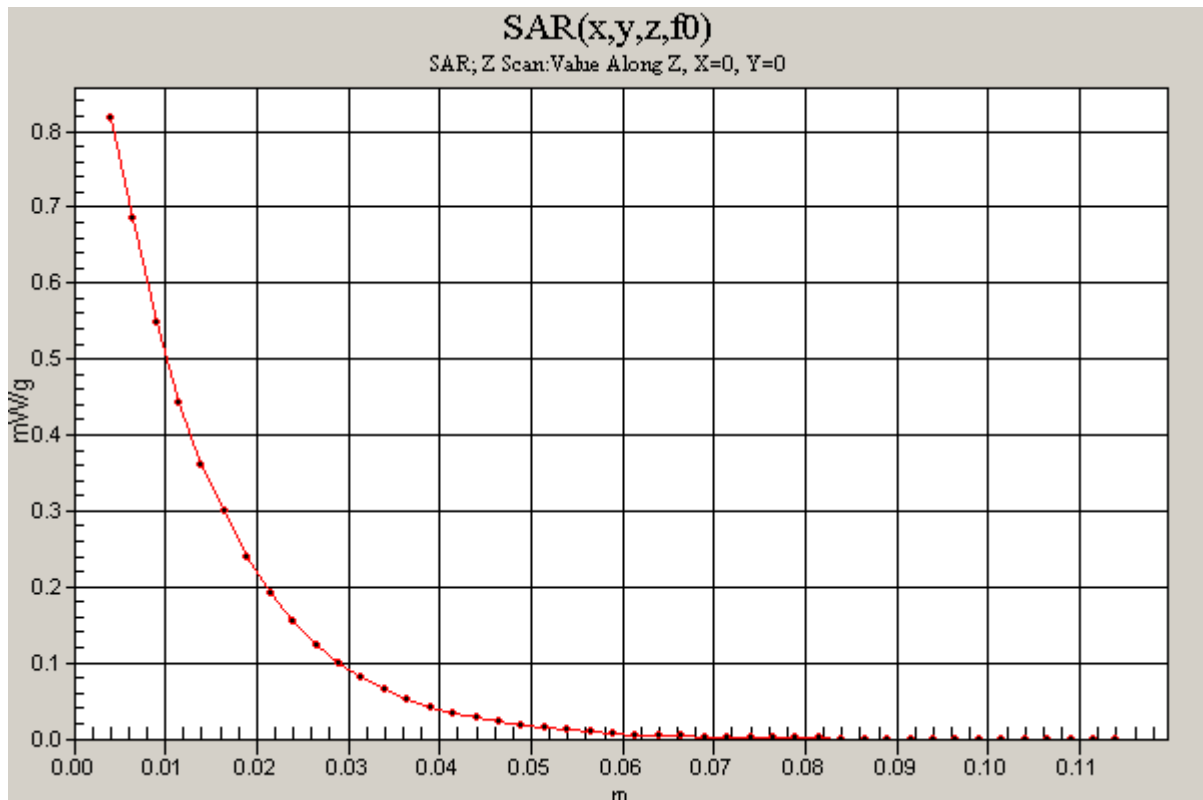
Phantom section: Right Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(5.36, 5.36, 5.36); Calibrated: 2007/11/15
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2007/11/07
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DAS4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

**Cheek/Touch Position/Z Scan (1x1x45):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=2.5\text{mm}$   
 Maximum value of SAR (measured) = 0.817 mW/g



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## Right Head, Ear/Tilt 661ch (1880.0MHz)

**DUT: Cellular Phone; Type: 830SH; Serial: 004401/11/149686/1**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(5.36, 5.36, 5.36); Calibrated: 2007/11/15
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2007/11/07
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DAS4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

**Ear/Tilt Position/Area Scan (11x6x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.257 mW/g

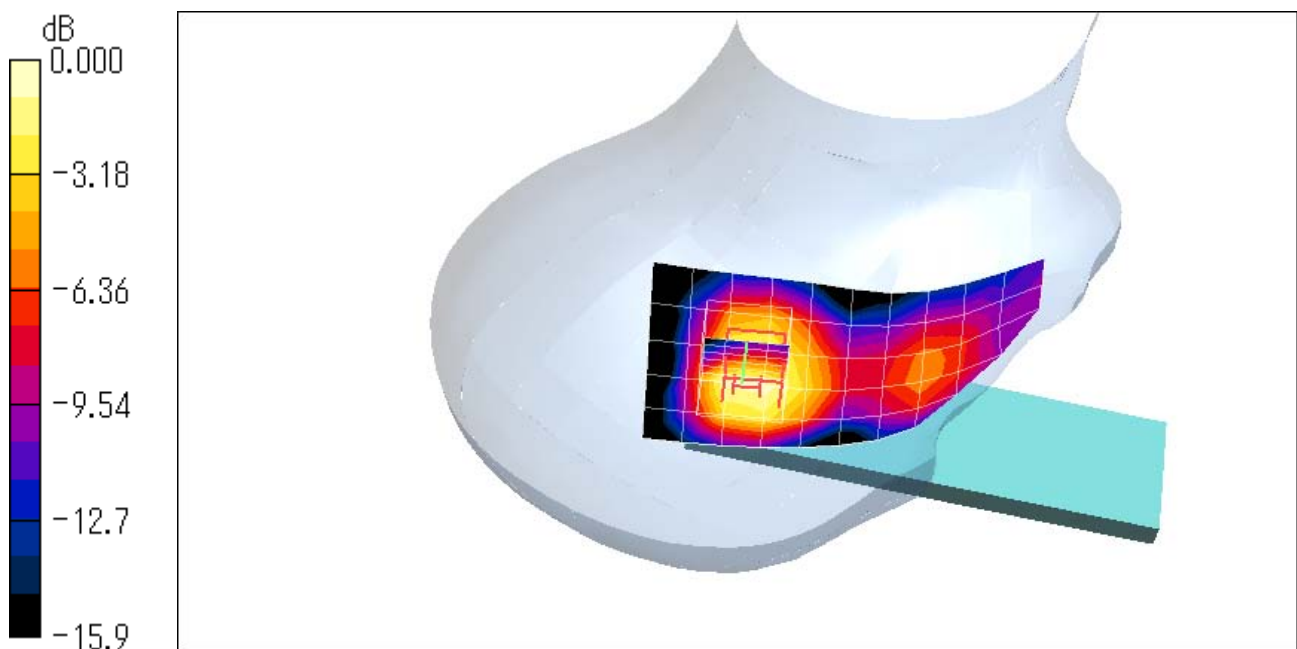
**Ear/Tilt Position/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.6 V/m; Power Drift = -0.023 dB

Peak SAR (extrapolated) = 0.398 W/kg

**SAR(1 g) = 0.263 mW/g; SAR(10 g) = 0.161 mW/g**

Maximum value of SAR (measured) = 0.284 mW/g





Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

## Body-worn 661ch (1880.0MHz)

**DUT: Cellular Phone; Type: 830SH; Serial: 004401/11/149686/1**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: M1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.56 \text{ mho/m}$ ;  $\epsilon_r = 52.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(4.8, 4.8, 4.8); Calibrated: 2007/11/15
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2007/11/07
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DAS4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

**Body-worn/Area Scan (6x9x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.292 mW/g

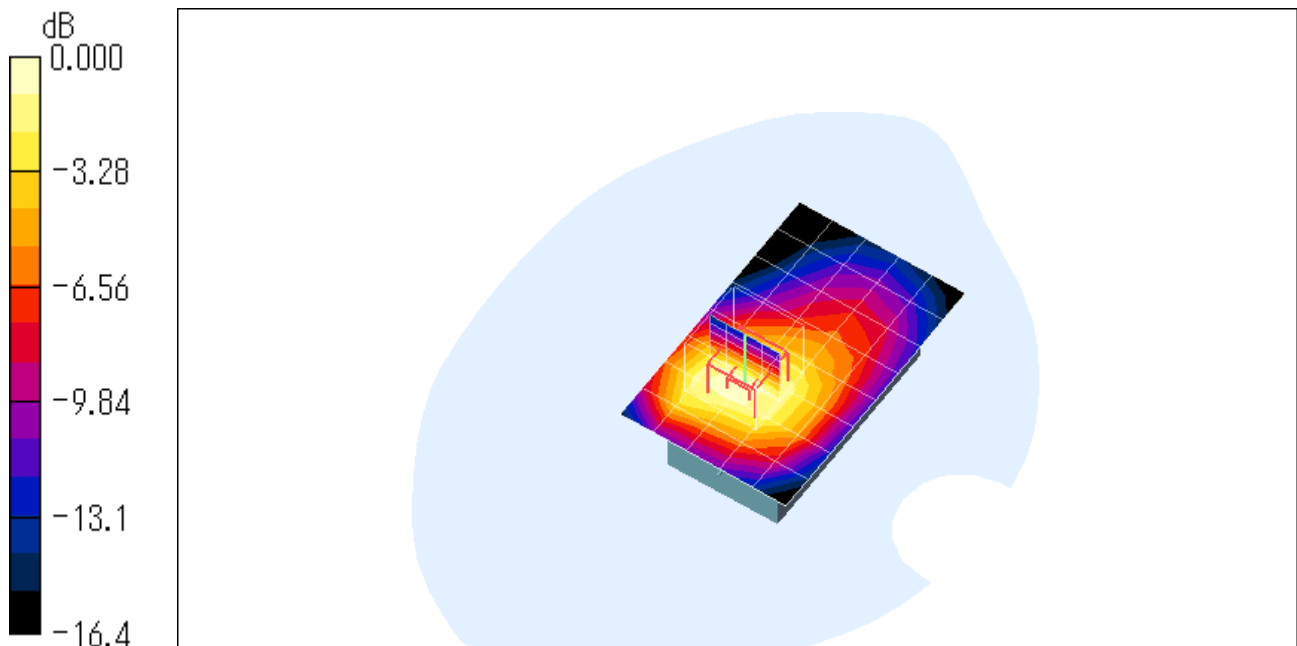
**Body-worn/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 14.3 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 0.503 W/kg

**SAR(1 g) = 0.307 mW/g; SAR(10 g) = 0.183 mW/g**

Maximum value of SAR (measured) = 0.333 mW/g



Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

**Body-worn 512ch (1850.2MHz) - GPRS mode****DUT: Cellular Phone; Type: 830SH; Serial: 004401/11/149686/1**

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.56$  mho/m;  $\epsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(4.8, 4.8, 4.8); Calibrated: 2007/11/15
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2007/11/07
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DAS4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

**Body-worn/Area Scan (6x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.525 mW/g

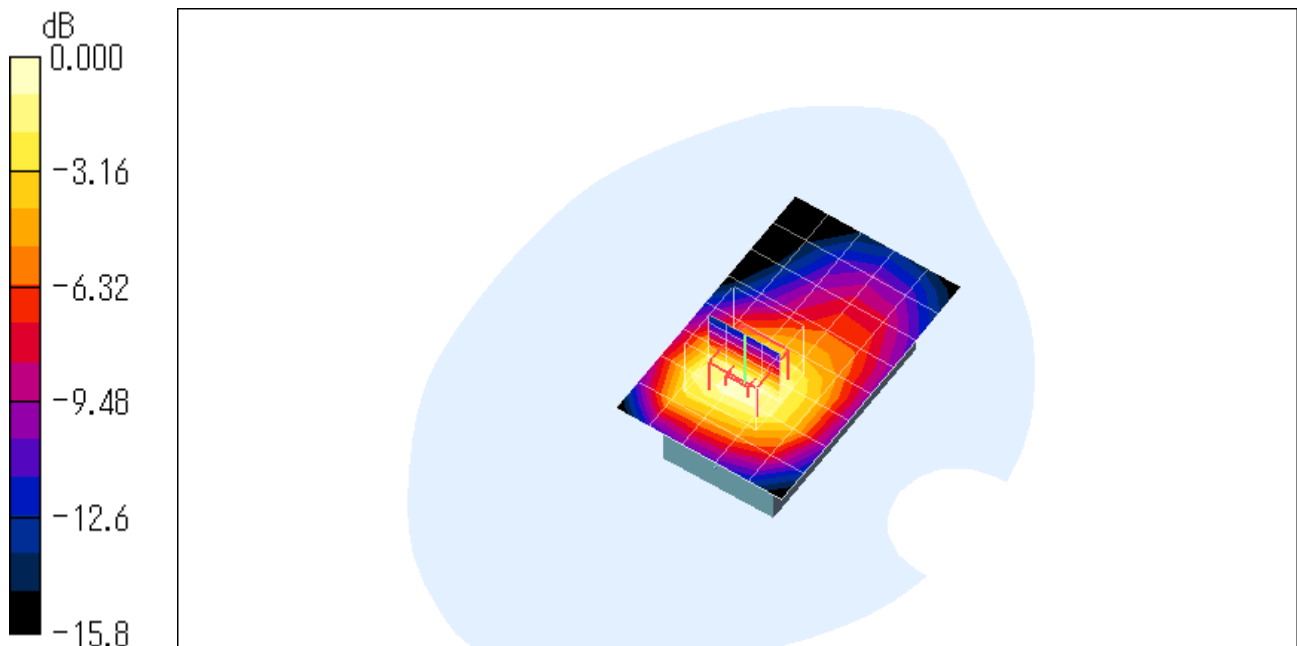
**Body-worn/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.5 V/m; Power Drift = -0.011 dB

Peak SAR (extrapolated) = 0.913 W/kg

**SAR(1 g) = 0.556 mW/g; SAR(10 g) = 0.335 mW/g**

Maximum value of SAR (measured) = 0.608 mW/g



Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

## Body-worn 661ch (1880.0MHz) - GPRS mode

**DUT: Cellular Phone; Type: 830SH; Serial: 004401/11/149686/1**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.56$  mho/m;  $\epsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(4.8, 4.8, 4.8); Calibrated: 2007/11/15
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2007/11/07
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DAS4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

**Body-worn/Area Scan (6x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.548 mW/g

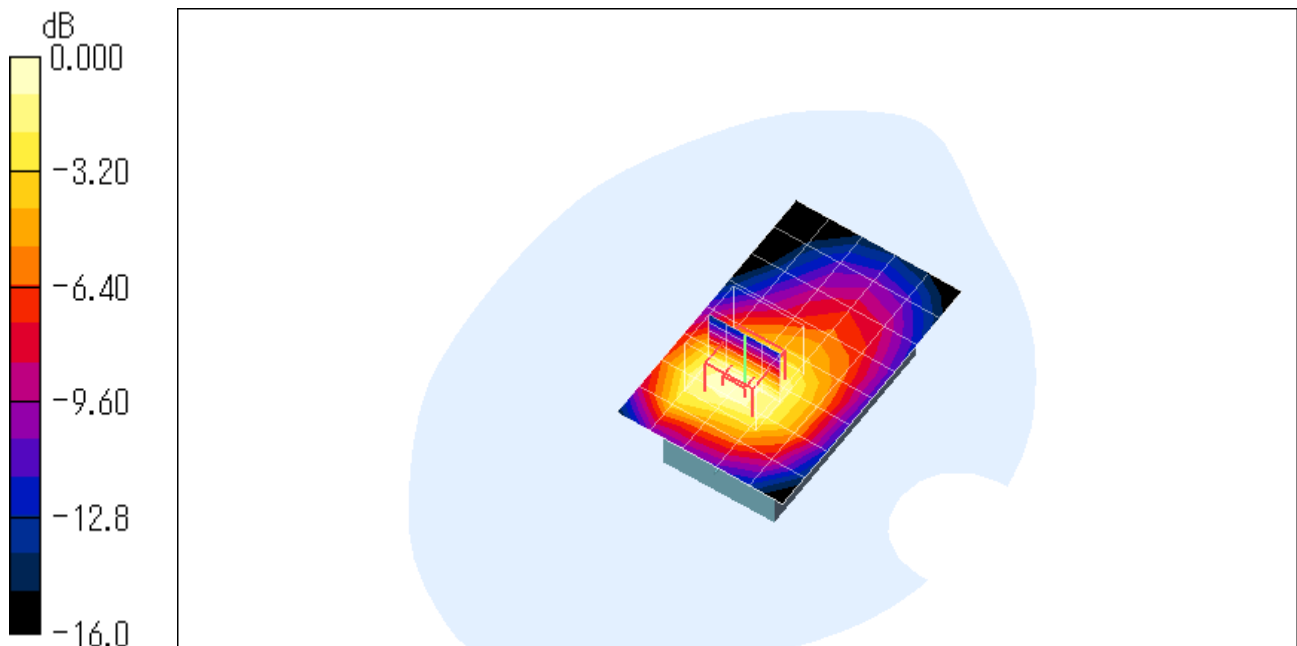
**Body-worn/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.8 V/m; Power Drift = -0.068 dB

Peak SAR (extrapolated) = 0.933 W/kg

**SAR(1 g) = 0.573 mW/g; SAR(10 g) = 0.344 mW/g**

Maximum value of SAR (measured) = 0.621 mW/g



Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

## Body-worn 810ch (1909.8MHz) - GPRS mode

**DUT: Cellular Phone; Type: 830SH; Serial: 004401/11/149686/1**

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.56 \text{ mho/m}$ ;  $\epsilon_r = 52.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(4.8, 4.8, 4.8); Calibrated: 2007/11/15
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2007/11/07
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DAS4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

**Body-worn/Area Scan (6x9x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.541 mW/g

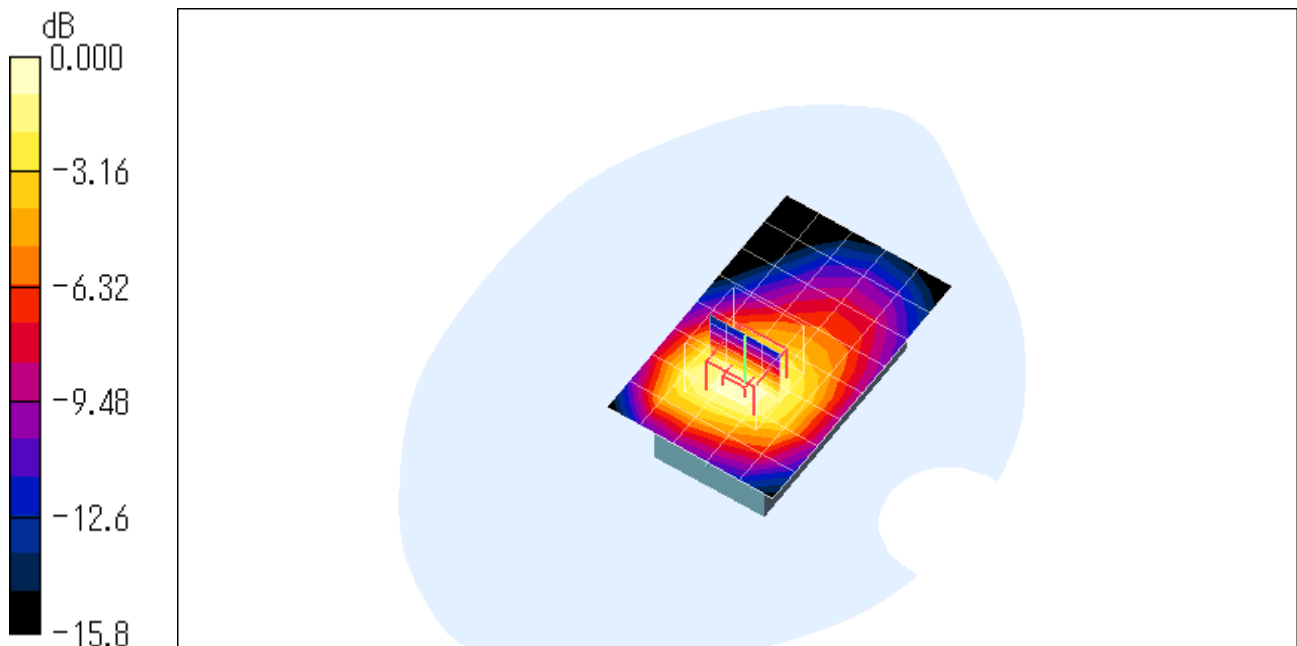
**Body-worn/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 19.7 V/m; Power Drift = -0.026 dB

Peak SAR (extrapolated) = 0.953 W/kg

**SAR(1 g) = 0.578 mW/g; SAR(10 g) = 0.347 mW/g**

Maximum value of SAR (measured) = 0.626 mW/g



Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

**Body-worn 810ch (1909.8MHz) - GPRS mode****DUT: Cellular Phone; Type: 830SH; Serial: 004401/11/149686/1**

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.56 \text{ mho/m}$ ;  $\epsilon_r = 52.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(4.8, 4.8, 4.8); Calibrated: 2007/11/15
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2007/11/07
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DAS4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

**Body-worn/Z Scan (1x1x45):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=2.5\text{mm}$ 

Maximum value of SAR (measured) = 0.622 mW/g

